

# Software Testing

## Abstract

A testing tool allowing convenient testing of programs and also classes in general. The tool automatically divides each program into many groups such that if one line (or statement) is executed it may reasonably be assumed that all the lines in the group are also executed. A tester is provided the ability to provide desired arguments (including class instances) and cause all groups to be executed such that all lines of code in the programs of a class are executed at least once. The groups are conveniently further logically combined into hierarchical blocks, with each block at a higher level corresponding to a logical structure such as if structure, for structure, while structure, etc. The blocks at the lowest level may contain a single group. Due to such hierarchy, a tester may visually easily identify the unexecuted blocks/groups. The tester may further define and execute small pieces of code (macros) in the middle of testing.